

**AMENDMENTS TO THE DRAWINGS**

Concurrently with the filing of this Amendment, Applicant has filed a replacement drawing sheet. The replacement drawing sheet reflects the change to Figure 4 entered by the Examiner in view of Applicant's previous amendment filed June 21, 2005 (the reference number for "ambient image" was changed from "31" to "38"). The replacement drawing sheet filed concurrently herewith is appropriately labeled "Replacement Sheet" as required by the Examiner.

**REMARKS**

Claims 1 and 3-13, 15, 16, and 18-42 are pending. Claims 1, 18, and 20 are independent claims. In the Office Action, claims 18-19 were allowed, and claims 14-17 and 34-38 were stated to contain allowable subject matter, but were objected to as depending from rejected base claims. Further, claims 1, 3, 4, 6-13, and 20-33 were rejected under 35 U.S.C. § 103(a) as allegedly unpatentable over G. Baxes, 1994, *Digital image processing: principles and application* ("Baxes"), in view of U.S. 4,625,329 ("Ishikawa"), and claim 5 was rejected under 35 U.S.C. § 103(a) as allegedly unpatentable over Baxes in view of Ishikawa and further in view of Google article, Jan. 29, 2001, "Point Operations" ("Google") and further in view of Hentea, IEEE Publications, 1993, "Algorithm for automatic threshold determination for image segmentation" ("Hentea").

In this Amendment, Applicant has amended independent claims 1 and 20 to further define patentable aspects. Claims 3 and 4 have been amended simply to change their dependencies to depend directly from independent claim 1. Claims 14 and 17 have been canceled without prejudice. Claims 15, 34, and 37 have been amended simply to coincide with the amendments to other claims. In addition, Applicant has added new dependent claims 39-42. Paragraphs 6, 33, 38, 53, and 57 of Applicant's specification have been amended as shown above solely to correct typographical oversights. In addition, Applicant is resubmitting a replacement drawing sheet appropriately labeled "Replacement Sheet" to overcome the Examiner's objection to the drawings. The amendments presented herein do not introduce any new matter.

Entry and consideration of the amendments presented herein are proper under 37 C.F.R. §1.116 for at least the following reasons. Firstly, the amendments do not raise new issues requiring further search or consideration. Applicant has simply moved limitations indicated to be allowable from dependent claims to independent claims 1 and 20. Therefore, the amendments do not require further search or consideration. Secondly, based on the indications of the Examiner, the present amendments clearly place the application in condition for allowance. Therefore, entry of the amendments presented herein is proper under 37 C.F.R. §1.116 and is hereby requested.

In view of the allowance of claims 18-19 and the indication that allowable subject matter is contained in claims 14-17 and 34-38, as well as the foregoing claim amendments and the

following remarks, Applicant respectfully submits that the amendments presented herein place all pending claims in condition for allowance.

#### **Reasons for Allowance or Allowability**

The Office Action contains a statement of reasons for the allowance or allowability of claims 14-19 and 34-38. Applicant agrees with the Examiner's conclusions regarding patentability, without necessarily agreeing with or acquiescing in the Examiner's reasoning. In particular, Applicant believes that the application is allowable because the prior art fails to teach, anticipate or render obvious the invention as claimed, independently of how the invention is paraphrased.

#### **Objection to the Drawings**

On page 2 of the Office Action, the Examiner fully entered the amendment to Figure 4 made in a drawing sheet submitted along with Applicant's previous amendment filed June 21, 2005. Nevertheless, the Examiner maintained the objection to the drawings and required that a drawing sheet labeled "Replacement Sheet" be submitted. With this paper, Applicant has concurrently filed a replacement drawing sheet appropriately labeled "Replacement Sheet" and in which the already-entered change to Figure 4 is included. In Figure 4, the reference number for "ambient image" is now "38." This change is consistent with the reference numeral used to describe "ambient image" in the Specification. (See, e.g., ¶ 25.) Therefore, Applicant respectfully requests that the Examiner withdraw the objection to the drawings.

#### **Objections to the Claims**

On page 2 of the Office Action, the Examiner objected to claims 3 and 4 for depending from canceled claim 2. Applicant thanks the Examiner for pointing out this oversight. Applicant has amended claims 3 and 4 as shown above such that claims 3 and 4 each depends from independent claim 1. Therefore, Applicant respectfully requests that the Examiner withdraw the objections to claims 3 and 4.

#### **Claims 1, 3-13, 15, 16, and 20-38**

On pages 16 and 17 of the Office Action, the Examiner indicated that claims 14-17 and 34-38 contained allowable subject matter and would be allowable if rewritten in independent

form including all of the limitations of the respective base claim and any intervening claims.

With respect to claims 14 and 17, the Examiner indicated:

The limitations “an image segmentation method as in claim 1, wherein setting the second revised pixel value includes a momentum-based heuristic” as recited in claim 14 and “an image segmentation method as in claim 1, wherein setting the second revised pixel value includes a gravity-based heuristic” as recited in claim 17 are not disclosed or suggested by the prior art of record. (Page 16 of the Office Action.)

Applicant agrees with the Examiner's conclusions regarding patentability, and has amended independent claim 1 to include the limitation of “wherein setting the second revised pixel value includes at least one of a momentum-based heuristic and a gravity-based heuristic.” Independent claim 20 has been similarly amended to the limitation of “said gap processing heuristic including at least one of a momentum-based heuristic and a gravity-based heuristic.” These amendments have been made to expedite allowance and are in no way an admission that independent claims 1 and 20 are not allowable without these limitations.

In view of the Examiner's indication of allowable subject matter being contained in claims 14-17 and 34-38, Applicant respectfully submits that independent claims 1 and 20, as amended, are in condition for allowance and respectfully requests that the Examiner withdraw the rejection of these claims. Dependent claims 3-13, 15, 16, and 21-38 are in condition for allowance at least by reason of their respective dependencies from either independent claim 1 or 20.

#### **The Dependent Claims Recite Patentable Subject Matter**

In addition to being in condition for allowance as claims depending from either independent claim 1 or 20, the dependent claims recite independently patentable subject matter. Merely by way of example, claims 15, 16, 34-36, and 38 are in condition for allowance at least for the following examples of patentable subject matter recited therein. With respect to claim 15, the prior art of record does not teach or suggest the limitations of adding to a counter value each time the next pixel in a sequence belongs to a first pixel category and subtracting from the counter value each time the next pixel in the sequence belongs to a second pixel category. With respect to claim 16, the prior art or record does not teach or suggest the limitations of the momentum-based heuristic stopping when the counter value is less than or equal to zero. With respect to claim 34, the prior art or record does not teach or suggest the limitations of

“selectively setting said pixel value using said momentum-based heuristic and said pixel values relating to said subset of sequential pixels.” With respect to claim 35, the prior art or record does not teach or suggest the limitations of “wherein said momentum-based heuristic analyzes said pixel values in said sequential vertical subset of pixels and said sequential horizontal subsets of pixels, to determine said plurality of pixel values. With respect to claim 36, the prior art or record does not teach or suggest the limitations of a momentum counter determining when the gap processing subsystem terminates the momentum-based heuristic. With respect to claim 38, the prior art or record does not teach or suggest the limitations of “wherein said gap processing subsystem sets said target pixel in accordance with said region size, said region distance, and said gravity-based heuristic.

**New Claims 39-42**

New claims 39-42 are fully supported by Applicant’s specification (see, e.g., Figure 4 and paragraph 0032 of Applicant’s specification). Applicant respectfully requests entry of new dependent claims 39-42 into the record because the claims are in condition for allowance at least by their respective dependencies from either independent claim 1 or 20. Therefore, claims 39-42 do not require additional search or consideration and should be entered into the record and allowed.

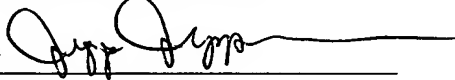
**CONCLUSION**

In view of the above, each of the presently pending claims in this application is believed to be in immediate condition for allowance. Accordingly, the Examiner is respectfully requested to pass this application to issue. If the Examiner believes that any further matters require clarification, the Examiner is encouraged to telephone the undersigned Applicant's representative.

Applicant believes that no fee is due with this response. However, if a fee is due, please charge our Deposit Account No. 18-0013, under Order No. 65858-0011, from which the undersigned is authorized to draw.

Dated: September 12, 2005

Respectfully submitted,

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